

DRAFT

ENVIRONMENTAL

ASSESSMENT

BARTA RANCH GAME FARM EXPANSION

JULY 1998

Montana Fish, Wildlife & Parks
Region 4
4600 Giant Springs Road
P.O. Box 6610
Great Falls, Montana 59406

Judith Basin County

TABLE OF CONTENTS

	<u>Page</u>
SUMMARY	1
INTRODUCTION	1
OBJECTIVES	1
PUBLIC PARTICIPATION	2
PROPOSED ACTION AND ALTERNATIVES	2
PURPOSE AND NEED OF THE PROPOSED ACTION	4
ROLE OF FWP AND DOL	4
AFFECTED ENVIRONMENT	4
ENVIRONMENTAL CONSEQUENCES	8
EA CONCLUSION	9
MITIGATION MEASURES	10
PART I. GAME FARM LICENSE APPLICATION INFORMATION	12
PART II. ENVIRONMENTAL REVIEW	15
EA DEFINITIONS	15
PHYSICAL ENVIRONMENT	
Land	16
Air	18
Water	20
Vegetation	23
Fish and Wildlife	25
HUMAN ENVIRONMENT	
Noise Effects	28
Land Use	29
Risk/Health Hazards	31
Community Impact	33
Public Services/Taxes	34
Aesthetics/Recreation	35
Cultural and Historical Resources	36
Summary	37
SUMMARY EVALUATION OF SIGNIFICANCE	38
PART III. NARRATIVE EVALUATION AND COMMENT	40
PART IV. EA CONCLUSION	42

FIGURES

FIGURE 1 Barta Ranch Game Farm Site Map and Land Ownership	3
FIGURE 2 Barta Ranch Game Farm Site Map showing Land Cover and Surface Water	5
FIGURE 3 Barta Ranch Game Farm Site Map showing Big Game Winter Range	7

APPENDICES

APPENDIX A	PRIVATE PROPERTY ASSESSMENT ACT CHECKLIST
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SUMMARY

ENVIRONMENTAL ASSESSMENT PROPOSED BARTA RANCH GAME FARM EXPANSION

INTRODUCTION

Montana Fish, Wildlife and Parks (FWP) is required to perform an environmental analysis in accordance with the Montana Environmental Policy Act (MEPA) for each proposal for projects, programs, legislation, and other major actions of state government significantly affecting the quality of the human environment (Administrative Rules of Montana [ARM] 12.2.430). FWP uses environmental assessments (EAs) in the game farm licensing process to identify and evaluate environmental impacts of a proposed game farm. EAs also determine whether the impacts would be significant and whether, as a consequence, FWP would perform a more detailed environmental impact statement (EIS).

When preparing an EA, FWP reviews environmental impacts of the Proposed Action, impacts of the No Action Alternative, and impacts of other alternative actions which include recommended and/or mandatory measures to mitigate the project's impacts. A mitigated EA includes alternatives with enforceable requirements (stipulations) which reduce impacts of the Proposed Action. The EA may also recommend a preferred alternative for the FWP decision maker.

This EA is prepared for a proposed expansion of the Barta Ranch game farm near Buffalo, Montana. Based upon its review of the Barta Ranch game farm application for expansion, FWP has prepared a mitigated EA.

OBJECTIVES

This EA has been prepared to serve the following purposes in accordance with FWP MEPA rules (ARM 12.2.430):

- ensure that FWP uses natural and social sciences in planning and decision making;
- to be used in conjunction with other agency planning and decision-making procedures to make a determination regarding the Proposed Action;
- assist in the evaluation of reasonable alternatives and the development of conditions, stipulations, and modifications to the Proposed Action;
- determine the need to prepare an EIS through an initial evaluation and determination of the significance of impacts associated with the Proposed Action;
- ensure the fullest appropriate opportunity for public review and comment on the Proposed Action; and
- examine and document the effects of the Proposed Action on the quality of the human environment.

PUBLIC PARTICIPATION

Public involvement in the EA process includes steps to identify and address public concerns. The Draft EA will be available for public review and comment from July 8, 1998 until 5 pm July 29, 1998 from the Region 4 FWP office at the address listed below. Comments regarding this EA should be submitted to the same address.

Mr. Gary Benson
Fish, Wildlife and Parks
P.O. Box 6610
4600 Giant Springs Road
Great Falls, Montana 59406
Phone (406) 454-5840

PROPOSED ACTION AND ALTERNATIVES

PROPOSED ACTION

FWP received a completed application May 12, 1998 from Earl and Cindy Barta to expand the existing Barta Ranch game farm in Judith Basin County, Montana. The Barta Ranch game farm is located approximately 25 miles southwest of Lewistown, and 5 miles west of Buffalo, Montana (Figure 1). The Bartas live adjacent to the game farm site. The Proposed Action consists of adding up to 200 animals to the existing game farm operation (2 acres), including 180 elk, 10 mule deer, and 10 white-tailed deer on a total of 200 acres. A quarantine and holding facility will be included within the overall game farm enclosure. The expansion would be used for breeding stock, meat production, and antler production. Occasionally, the owner or a member of the public may be allowed to shoot a game farm animal within the 200-acre enclosure. The Proposed Action also includes changing the names of the game farm license from Earl and Bruce Barta to Earl and Cindy Barta.

The existing game farm enclosure covers an area of approximately 100x900 feet (about 2 acres) and would be modified to provide the quarantine and handling area for the proposed expansion. The existing game farm enclosure typically contains from 20 to 30 elk. The applicant would breed, sell, and dispose of domestic elk in accordance with Montana game farm and disease control requirements stipulated in Montana statute and administrative rules. Fence construction would be in accordance with requirements of FWP under ARM 12.6.1503A, and proposed changes to these rules. Fencing would consist of 8-foot high, tightlock mesh game fence, 2 $\frac{3}{4}$ -inch steel pipe posts spaced not more than 24 feet apart, and 2 $\frac{7}{8}$ -inch steel pipe corner posts. Posts would be set 3 feet into the soil and corners would be braced. Steel gates would be 8 feet high and located in the southeast corner area near the buildings and quarantine/holding facilities. The quarantine facility would have a solid wall adjacent to the game farm enclosure, with an 8-foot high wire mesh game fence on the sides that are not adjacent to the proposed game farm enclosure.

ALTERNATIVES

One alternative (No Action Alternative) is evaluated in this EA. Under the No Action Alternative, FWP would not issue a license for the Barta Ranch game farm expansion as proposed. Therefore, no additional game farm animals would be placed on the proposed expansion area. Implementation of the No Action Alternative would not preclude other activities allowed under local, state and federal laws to take place at the game farm site.

PURPOSE AND NEED OF THE PROPOSED ACTION

The Barta Ranch game farm expansion would be a commercial enterprise that would provide meat, antler and breeding stock. The game farm expansion site also may be used occasionally for shooting a game farm animal by the owner or member of the public.

ROLE OF FWP AND DEPARTMENT OF LIVESTOCK

FWP is the lead agency in preparing this EA for the proposed project. This document is written in accordance with the Montana Environmental Quality Council (EQC) MEPA Handbook and FWP statutory requirements for preparing an EA under Title 75, Chapter 1, Part 2 Montana Code Annotated (MCA) and FWP rules under ARM 12.2.428 et seq.

FWP shares regulatory responsibilities for new and expanding game farms with the Department of Livestock (DoL). The DoL is responsible for regulating the health, transportation and identification of game farm animals. During the application process, all quarantine area plans and specifications are submitted to the DoL for approval and inspection of the proposed quarantine facility. No game farm licenses are issued without such approval and inspection.

AFFECTED ENVIRONMENT

The proposed Barta Ranch game farm expansion is located on 200 acres approximately 5 miles west of Buffalo, Montana in Judith Basin County. This section summarizes primary environmental resources in the project area.

LAND RESOURCES

The proposed Barta Ranch game farm expansion lies at the southern end of the Judith Basin, a topographic depression in an unglaciated part of the northern Great Plains. The proposed site is located at an elevation of approximately 4,700 feet above mean sea level. The Little Belt Mountains lie several miles to the south of the site and the Big Snowy Mountains are to the east. The proposed expansion area is currently used for hay production and rangeland (Figure 2).

General topography of the area slopes gently to the east, breaking into Weber Coulee to the north and Coyote Creek to the south. Slopes within the expansion area vary from about 1 to 6 percent. A Cenex Pipeline Company petroleum pipeline crosses the property on a diagonal line heading to the northwest.

Surficial geology of the site and vicinity is composed of gravel-covered Quaternary-age terrace deposits. These terrace gravels are mantled on the gently northeastward dipping Upper Cretaceous rocks of the Telegraph Creek Formation and Colorado Shale. Three soil types are mapped in the proposed expansion area which are similar in texture and have developed in similar parent materials. Wind erosion can be a serious problem in these soils if vegetation is removed and the soil is left unprotected.

WATER RESOURCES

The Barta Ranch game farm area is located in the Judith Basin on a gentle east-sloping bench between Coyote Creek to the south and Weber Coulee to the north (Figure 2). Coyote Creek joins West Buffalo Creek approximately 1½ miles southeast of the game farm site. Weber Coulee extends eastward and joins Big Coulee approximately 7 miles northeast of the game farm area. Both of these drainages are tributary to Ross Fork Creek which flows northward to the Judith River; Ross Fork Creek is located approximately 7 miles east of the game farm site. No surface water or drainages occur on the relatively flat 200-acre game farm expansion site. No springs, seeps, or wetlands occur on the game farm site.

An existing 125-foot deep well near the southeast corner of the game farm site supplies the existing game farm operation and would provide water to the expansion area; the depth to water in this well is approximately 37 feet. Another well in the same general area supplies potable water to the Barta residence.

VEGETATION RESOURCES

The proposed game farm expansion consists of a 200-acre tract for purposes of raising up to 180 elk and possibly 20 deer (mule and white-tailed). This area is currently used to grow dryland alfalfa (36 acres), grass hay (26 acres), and native pasture for grazing purposes (138 acres). The native grass pasture does have scattered crested wheatgrass and yellow sweetclover, but for the most part is comprised of native grasses and forbs. Adjacent lands to the proposed game farm site are farmed as dryland wheat.

The elevation at the relatively flat game farm site is approximately 4,700 feet. Native vegetation in the dryland alfalfa pasture has been replaced with alfalfa and smooth brome. The grass hay pasture is primarily smooth brome. Hay production on these two pastures averages about 1.5 tons per acre. Dominant vegetation in the native grass pasture includes green needlegrass, needle-leaf sedge, blue grass (not identified to species), western wheatgrass, crested wheatgrass, yellow sweetclover, broom snakeweed, and fringed sagewort. Estimated forage production in this area would be 1000-1500 pounds per acre.

WILDLIFE RESOURCES

Current big game use in the Barta Ranch game farm area consists primarily of a small number of pronghorn antelope. This area formerly supported more pronghorns, but a high female harvest rate and harsh winter in 1996-97 have reduced the herd substantially (Earl Barta, pers. commun., 1998). Pronghorn are seasonally migratory through this area. They tend to winter on high windswept ridges closer to the Little Belt Mountains, move to lower elevations in spring, and slowly move to higher elevations as summer and fall progress.

White-tailed deer occur in this area, but generally their use is restricted to riparian habitat along small streams and shelter belts around ranch/farm headquarters. Mule deer occur only as transient individuals through this area (Figure 3). An occasional bull elk would be expected to pass through this area since the Little Belt Mountains (Figure 3) and Snowy Mountains are relatively close. In addition, an occasional mountain lion or black bear might pass through the area. Upland game birds in this area are primarily Hungarian partridge and sharp-tailed grouse. There are no known threatened or endangered species that inhabit the proposed game farm site, or live in proximity to the site. There are no aquatic resources associated with the proposed game farm expansion.

ENVIRONMENTAL CONSEQUENCES

Only primary resources that have potential adverse effects from the Proposed Action are summarized in this section. A detailed discussion of environmental consequences is contained in *Part II* of this EA (pp. 15-39).

LAND RESOURCES

The proposed expansion of the Barta Ranch game farm into the 200-acre rangeland and hay field would likely have only minor impacts to land and soil resources. The primary impact would occur if the stocking rate exceeds the carrying capacity of the pasture to the point that vegetative cover is significantly reduced and bare ground is exposed. This situation has occurred in the existing 2-acre game farm enclosure; however, there are typically 10 to 15 elk per acre in this area. Because the soil types present in the expansion area are susceptible to wind erosion, a loss of soil would result from a condition of bare ground, lowering the productivity of soil. These impacts can be mitigated by maintaining a reasonable stocking rate in the expansion area (maximum proposed number of game farm animals at 200 would result in an average of 1 elk or deer per acre).

WATER RESOURCES

Increased runoff and erosion could occur in some areas of the game farm expansion if the stocking rate exceeds the carrying capacity of the pasture and vegetative cover is diminished. The relatively large game farm area and proposed maximum stocking rate (200 elk/deer on 200 acres), however, should allow for maintenance of adequate vegetative cover. Domestic elk fecal matter and nutrient-enriched water may have a minor effect on the quality of groundwater in the vicinity of the game farm, primarily during periods of snowmelt and major precipitation events.

VEGETATION RESOURCES

The Proposed Action would place up to 180 adult elk and 20 adult deer within the enclosure for a maximum stocking density of 1.1 acres per adult elk and 10 acres per adult deer (the 180 elk plus 20 deer would be equivalent to a total of about 186 elk grazing in this area). Forage produced within the 200-acre enclosure (approximately 300,000 pounds annually) would only meet about 40 percent of the year-long forage needs of 180 adult elk and 20 adult deer (approximately 750,000 pounds). Assuming that long-term grazing impacts do not decrease forage production significantly, supplemental feed would need to be provided to the 200 elk and deer for over half the year.

There would be a loss of 62 acres of dryland hay to pasture elk. The 138-acre native grass pasture would be grazed by elk rather than cattle. The conversion of this 200-acre tract to a game farm would not have any adverse impacts on local agriculture. Intensive grazing by elk and deer at this site would reduce vegetative cover, reduce annual productivity, and increase bare ground. This would favor the establishment of annual forbs, some of which may be classified as noxious weeds.

WILDLIFE RESOURCES

When the proposed game farm enclosure is completed, wild pronghorn and deer would be excluded from approximately 200 acres of native prairie and dryland hay. This habitat is widely distributed within the general area and the loss of 200 acres of native pasture and dryland hay would not be significant. This

site is not critical habitat for any big game species. Currently, pronghorn numbers in this area are limited by a heavy legal harvest, and deer use of this area is restricted by lack of adequate vegetative and topographic cover. The proposed game farm is not large enough to significantly influence seasonal movement of pronghorn and deer through this area. Due to the upland location of the proposed game farm, there would be no impacts to aquatic systems beyond those already related to intensive farming and grazing that presently occur in this area.

The Proposed Action is expected to change slightly the diversity and abundance of at least two nongame species living in this area. The proposed game farm site is currently used for courtship displays and presumably for nesting by the Sprague's pipit. This species is associated with moderately grazed to lightly grazed upland grass dominated ridges. The intensive grazing by elk and deer would likely render this site unsuitable for the Sprague's pipit. However, intensively grazed sites are preferred foraging and nesting areas for the horned lark and they would be expected to utilize this site following the introduction of elk and deer.

There is an undetermined potential of domestic elk or deer carrying or becoming infected with a contagious wildlife disease or parasite such as tuberculosis or meningeal worm, and then coming in contact (through-the-fence, nose-to-nose, nose-to-soil, or ingress/egress) with wild deer, elk, or other wildlife. It is also possible that diseases and parasites carried by wild elk or deer could be introduced to domestic elk or deer.

CULTURAL RESOURCES

A previous inventory of cultural resources has not been conducted on the proposed game farm expansion area. The State Historic Preservation Office recommends that a reconnaissance survey be conducted prior to project initiation. This would determine if sites exist and if they would be impacted by the Proposed Action.

CUMULATIVE EFFECTS

The Proposed Action would not result in potential impacts that are individually minor but cumulatively considerable. Cumulative effects from past, present and reasonably foreseeable activities in all resource areas would be similar to those described for the Proposed Action.

EA CONCLUSION

MEPA and game farm statutes require FWP to conduct an environmental analysis for game farm licensing as described in the *Introduction* of this *Summary* section (p. 1). FWP prepares EAs to determine whether a project would have a significant effect on the environment. If FWP determines that a project would have a significant impact that could not be mitigated to less than significant, the FWP would prepare a more detailed EIS before making a decision.

Based on the criteria evaluated in this EA, an EIS would not be required for the Barta Ranch game farm. The appropriate level of analysis for the Proposed Action is a mitigated EA because all impacts of the Proposed Action have been accurately identified in the EA, and all identified significant impacts would be mitigated to minor or none.

MITIGATION MEASURES

The mitigation measures described in this section address both minor and significant impacts. FWP would require stipulations to mitigate all potentially significant impacts resulting from the Proposed Action. Potential minor impacts from the Proposed Action are addressed as mitigation measures that are strongly recommended to remain in compliance with state and federal environmental laws, but are not required.

REQUIRED STIPULATIONS

The following stipulation is designed to mitigate significant impacts identified in the EA to below the level of significance:

Report ingress of any wild game animals and predators (i.e., bear, lion, and coyote) or egress of domestic elk or deer to the Montana FWP immediately. The report must contain the probable reason why or how ingress/egress occurred.

This stipulation is imposed to mitigate potentially significant risk to wildlife health posed by the proposed game farm expansion. Risk to wildlife health from contact between game farm animals and wild game is potentially significant due to the site being located in an area currently utilized by wild game.

The information provided by the stipulation would help both the applicant and FWP to address ingress and egress incidents and to minimize contact between wild and domestic animals. This stipulation, in addition to existing FWP fencing and wildlife protection requirements, would effectively reduce the risk to wildlife health to below significant.

RECOMMENDED MITIGATION MEASURES

The following recommended mitigation measures address minor impacts identified in the EA for resources that are of primary concern for the Proposed Action:

Land Resources

- Uncoated steel posts may corrode with time in the alkaline soils; therefore, coated posts or other noncorrosive materials should be considered.
- Maintain a reasonable stocking rate within the game farm enclosure to minimize changes in soil structure and potential increases in erosion from disturbed ground. A "reasonable stocking rate" is defined under *EA Definitions* on the first page of *Part II -- Environmental Review* (p. 15); additional information regarding a reasonable stocking rate is provided under Section 4 (*Vegetation*) of *Part II* in this EA (pp. 23-24).
- Provide sufficient holding area for elk and deer away from the Cenex pipeline corridor in case problems with the pipeline occur and servicing is required.

Water Resources

- Maintain a reasonable stocking rate in the game farm area to mitigate potential impacts from erosion and fecal matter. Potential water quality impacts also could be minimized by disposing dead animals and excess fecal material at a site that is isolated from surface water and groundwater (disposal must meet county regulations for solid waste).

- For any areas that may have erosion and sedimentation problems, utilize best management practices (BMPs) where surface water could enter Coyote Creek or Weber Coulee. The BMPs may include earth berms, straw bale dikes, vegetative buffer zones, and/or silt fences.

Vegetation Resources

- Provide supplemental feed to the elk and deer during fall and winter to meet the nutritional requirements of these animals. Some supplemental feed should also be provided during spring and summer to reduce the probability of overgrazing the site (see further discussion in Section 4 (*Vegetation*) of *Part II* in this EA (pp. 23-24).

Wildlife Resources

- Store hay, feed, and salt away from exterior fences or enclose in buildings.
- Feed game farm animals at interior portions of the enclosure and not along the perimeter fence.
- Remove dead animals, excess fecal material, and waste feed from the game farm and deposit at an approved site not likely to be used by humans, domestic animals, and wild animals.
- Inspect exterior game farm fence on a regular basis and immediately after events likely to damage fence to ensure its integrity with respect to trees, frost-heaving, corrosion, burrowing animals, predators, and other game animals.
- If fence integrity or ingress/egress becomes a problem, adjust the fence as necessary, including: double fencing, electrification, additional post support, replacing damaged posts, or increased fence height.
- During winters of exceptional snow cover, remove snow on either side of the perimeter fence to prevent ingress/egress, or keep game farm animals away from fence areas where significant snow buildup occurs.

Cultural Resources

Mitigate impacts to cultural resources by stopping work in the area of any observed archeological artifact. Report discovery of historical objects to:

Montana Historical Society
Historic Preservation Office
1410 8th Avenue; P.O. Box 201202
Helena, Montana 59620
(406) 444-7715.

If work stoppage in the area containing observed artifacts is not possible, record the location and position of each object, take pictures and preserve the artifact(s).

DRAFT
PART I. GAME FARM LICENSE APPLICATION

ENVIRONMENTAL ASSESSMENT CHECKLIST

Montana Fish, Wildlife & Park's authority to regulate game farms is contained in sections 87-4-406 through 87-4-424, MCA and ARM 12.6.1501 through 12.6.1519.

1. **Name of Project:** Barta Ranch Game Farm Expansion

Date of Acceptance of Completed Application: May 12, 1998

2. **Name, Address and Phone Number of Applicant(s):**

Earl and Cindy Barta
HC 18, Box 12
Buffalo, Montana 59418
(406) 374-2275

3. **If Applicable:**

Estimated Construction/Commencement Date: after license is issued

Estimated Completion Date: 1 year after license is issued

Is this an application for expansion of existing facility or is a future expansion contemplated?

This is an application for an expansion.

4. **Location Affected by Proposed Action (county, range and township):**

Judith Basin County
South half of Section 34, Township 13 North, Range 14 East

5. **Project Size:** Estimate number of acres that would be directly affected that are currently:

(a) Developed:	(d) Floodplain...
residential.....	_____ acres
industrial.....	_____ acres
(b) Open Space/Woodlands/Areas....	(e) Productive:
_____ acres	irrigated cropland.....
	_____ acres
	dry cropland.....
	_____ 60 acres
	forestry.....
	_____ acres
(c) Wetlands/Riparian Areas.....	rangeland.....
_____ acres	_____ 140 acres
	other.....
	_____ acres

6. **Map/site plan:**

The following maps are included in the introductory summary of this EA:

- Figure 1:** Site Map Showing Land Ownership
Figure 2: Land Use and Land Cover
Figure 3: Big Game General and Winter Range

7. **Narrative Summary of the Proposed Action or Project including the Benefits and Purpose of the Proposed Action:**

FWP received a completed application May 12, 1998 from Earl and Cindy Barta to expand the existing Barta Ranch game farm in Judith Basin County, Montana. The Barta Ranch game farm is located approximately 25 miles southwest of Lewistown, and 5 miles west of Buffalo, Montana (Figure 1). The Bartas live adjacent to the game farm site. The Proposed Action consists of adding up to 200 animals to the existing game farm operation, including 180 elk, 10 mule deer, and 10 white-tailed deer on a total of 200 acres. The expansion would be used for breeding stock, meat production, and antler production. Occasionally, the owner or a member of the public may be allowed to shoot a game farm animal within the 200-acre enclosure.

The existing game farm enclosure covers an area of approximately 100x900 feet (about 2 acres) and would be modified to provide the quarantine and handling area for the proposed expansion. The existing game farm enclosure typically contains from 20 to 30 elk. The applicant would breed, sell, and dispose of domestic elk in accordance with Montana game farm and disease control requirements stipulated in Montana statute and administrative rules. Fence construction would be in accordance with requirements of FWP under ARM 12.6.1503A, and proposed changes to these rules. Fencing would consist of 8-foot high, tightlock mesh game fence, 2 $\frac{3}{8}$ -inch steel pipe posts spaced not more than 24 feet apart, and 2 $\frac{3}{8}$ -inch steel pipe corner posts. Posts would be set 3 feet into the soil and corners would be braced. Steel gates would be 8 feet high and located in the southeast corner area near the buildings and quarantine/holding facilities. The quarantine facility would have a solid wall adjacent to the game farm enclosure, with an 8-foot high wire mesh game fence on the sides that are not adjacent to the proposed game farm enclosure.

The Proposed Action includes changing the names of the game farm license from Earl and Bruce Barta to Earl and Cindy Barta. Earl Barta has been in ranching most of his life and has been raising elk in his 2-acre game farm for approximately 3 years.

8. **Listing of any other Local, State or Federal agency that has overlapping or additional jurisdiction:**

(a) **Permits:**

<u>Agency Name</u>	<u>Permit</u>	<u>Approval Date and Number</u>
Department of Livestock	approval of quarantine and handling facility	Pending

(b) **Funding:**

<u>Agency Name</u>	<u>Funding Amount</u>
none	

(c) Other Overlapping or Additional Jurisdictional Responsibilities:

<u>Agency Name</u>	<u>Type of Responsibility</u>
Montana Department of Livestock	disease control
Montana Department of Environmental Quality (DEQ)	water quality, air quality waste management
Montana State Historical Preservation Office (SHPO)	cultural resources
Montana Department of Natural Resources and Conservation (DNRC)	water rights
Natural Resource Conservation Service (NRCS)	soil conservation
Judith Basin County Conservation District	stream crossings
U.S. Army Corps of Engineers (COE)	wetlands
Judith Basin County Weed Control District	weed control

9. List of Agencies Consulted During Preparation of the EA:

Montana Department of Livestock
Montana Department of Environmental Quality
Montana State Historical Preservation Office
Montana Bureau of Mines and Geology
Montana Department of Natural Resources and Conservation
U.S. Department of Agriculture, Natural Resource Conservation Service
Judith Basin County Conservation District

REFERENCES:

Barta, Earl & Cindy. 1998. Application For Game Farm License, completed March 10, 1998; Barta Ranch, HC 81, Box 12, Buffalo, Montana, 59418.

PART II. ENVIRONMENTAL REVIEW

This section of the EA presents results of an environmental review of the proposed Barta Ranch game farm expansion (Proposed Action). The assessment evaluated direct and indirect impacts and cumulative effects of the Proposed Action on the following resources of the physical environment: land, air, water, vegetation, fish and wildlife; and the following concerns of the human environment: noise, land use, human health risk, community impacts, public services and taxes, aesthetics and recreation, and cultural and historical resources. Impacts were determined to fall in one of four categories: unknown, none, minor and significant. For the purposes of this EA, and in accordance with ARM 12.2.429 through 12.2.431, these terms are defined as follows:

EA DEFINITIONS

Cumulative Effects: Collective impacts on the physical and human environment of the Proposed Action when considered in conjunction with other past and present actions related to the Proposed Action by location or generic type. Related future actions must also be considered when these actions are under concurrent consideration by any state agency through pre-impact statement studies, separate impacts statement evaluation, or permit processing procedures.

Unknown Impacts: Information is not available to facilitate a reasonable prediction of potential impacts.

Significant Impacts: A determination of significance of an impact in this EA is based on individual and cumulative impacts from the Proposed Action. If the Proposed Action results in significant impacts that can not be effectively mitigated, FWP must prepare an EIS. The following criteria are considered in determining the significance of each impact on the quality of the human environment:

- severity, duration, geographic extent and frequency of occurrence of the impact;
- probability that the impact would occur if the Proposed Action occurs;
- growth-inducing or growth-inhibiting aspects of the impact, including the relationship or contribution of the impact to cumulative effects;
- quantity and quality of each environmental resource or value that would be affected, including the uniqueness and fragility of those resources or values;
- importance to the state and to society of each environmental resource or value that would be affected;
- any precedent that would be set as a result of an impact of the Proposed Action that would commit FWP to future actions with significant impacts or a decision in principle about such future actions; and
- potential conflict with local, state, or federal laws, requirements, or formal plans.

Reasonable Stocking Rate: The density of animals appropriate to maintain vegetative cover in pasture condition that minimizes soil erosion from major precipitation events and snowmelt. The methodology for determining reasonable stocking rate is presented under the evaluation for *Vegetation Resources*, in Section 4 of the Checklist portion of this EA document (pp. 23-24). Factors to consider in determining an overall reasonable stocking rate include vegetation type and density, ground slope, soil type, and precipitation.

PHYSICAL ENVIRONMENT

1. <u>LAND RESOURCES</u> Would the Proposed Action result in:	POTENTIAL IMPACT				CAN IMPACT BE MITIGATED	COMMENT INDEX
	UNKNOWN	NONE	MINOR	SIGNIFICANT		
a. Soil instability or changes in geologic substructure?		X				
b. Disruption, displacement, erosion, compaction, moisture loss, or over-covering of soil which would reduce productivity or fertility?			X		Yes	1(b)
c. Destruction, covering or modification of any unique geologic or physical features?		X				
d. Changes in siltation, deposition or erosion patterns that may modify the channel of a river or stream or the bed or shore of a lake?		X				

AFFECTED ENVIRONMENT:

The proposed Barta Ranch game farm expansion is located on 200 acres about 5 miles west of Buffalo, Montana in Judith Basin County. The site lies at the southern end of the Judith Basin, a topographic depression in an unglaciated part of the northern Great Plains, at an elevation of about 4,700 feet above mean sea level. The Little Belt Mountains lie several miles to the west of the site and the Big Snowy Mountains to the east. The proposed expansion area is currently used for dry cropland and rangeland and is situated to the west of the existing 2-acre game farm.

General topography of the area slopes gently to the east, breaking into Weber Coulee to the north and Coyote Creek to the south (Figure 2). Slopes within the expansion area vary from about 1 to 6 percent. A Cenex Pipeline Company petroleum pipeline crosses the property on a diagonal line heading to the northwest.

Surficial geology of the site and vicinity is composed of gravel-covered Quaternary-age terrace deposits (Zimmerman, 1966). These terrace gravels are mantled on the gently northeastward dipping Upper Cretaceous-age rocks of the Telegraph Creek Formation and the Colorado Shale (Zimmerman, 1966).

Soil information is available from the Soil Survey of Judith Basin County Area (Soil Conservation Service (SCS) and Forest Service, 1967). There are three soil types mapped in the proposed expansion area -- Judith gravelly clay loam, 0-2% slopes; Judith gravelly clay loam, 2-4% slopes; and Utica gravelly loam, 2-8% slopes. Soils in the three mapping units are similar in texture and have developed in similar parent materials -- the gravelly terraces that are of alluvial origin and contain mainly limestone pebbles. The Judith gravelly clay loams cover an extensive area in the Judith Basin and are moderately deep, well-drained, and strongly calcareous in the deeper subsoil horizons. The gravelly substratum is normally encountered at a depth of 16 to 30 inches. Wind erosion can be a serious problem in the Judith Series soils if vegetation is removed and soil is left unprotected. The Utica gravelly loams are present in narrow bands at the outer edge of the bench near the southern fenceline boundary of the proposed expansion area. These soils are excessively drained, have a thin surface layer, are very gravelly, and are strongly calcarious at shallow depth. The gravelly substratum is composed of 60 to 80 percent coarse fragments.

PROPOSED ACTION:

- 1(b) The proposed game farm expansion into the adjacent 200-acre hayfield and rangeland would likely have only minor impacts to land and soil resources, assuming that adequate supplemental feed is provided for the elk/deer. The primary impact would occur if the stocking rate exceeds the carrying capacity of the pasture to the point that vegetative cover is reduced to an unacceptable level and bare ground is exposed. Because the soil types present in the area are susceptible to wind erosion, a loss of soil would result from this condition, lowering the productivity of the soils. These impacts can be mitigated by maintaining a reasonable stocking rate.

NO ACTION:

Under the No Action Alternative, the current condition of the property would not change. Impacts to the soil resource under the No Action Alternative may be very similar to the Proposed Action if the property is grazed by livestock.

CUMULATIVE EFFECTS:

As this area is used intensively for agricultural production, the cumulative effect of using the proposed area as a game farm is expected to be slight. The proposed permit area does not contain any unique or significant soil or land resources that would be lost due to the proposed land use change.

COMMENTS:

Required Stipulations: None

Recommended Mitigation Measures:

The moderate to strongly alkaline reaction of the soil should be considered when designing the exterior fence. Uncoated steel posts may corrode with time in these soils.

Maintain a reasonable stocking rate within the game farm enclosures to minimize changes in soil structure and potential increases in erosion from disturbed ground. A "reasonable stocking rate" is defined under *EA Definitions* on the first page of *Part II - Environmental Review* of this EA (p. 15); additional information regarding a reasonable stocking rate is provided under Section 4 (*Vegetation*) of *Part II* in this EA (pp. 23-24).

Provide sufficient holding area for elk and deer away from the Cenex pipeline corridor in case problems with the pipeline occur and servicing is required.

REFERENCES:

U.S. Department of Agriculture, Soil Conservation Service and Forest Service. 1967. Soil Survey of Judith Basin Area, Montana. Published in cooperation with the Montana Agricultural Experiment Station. January. 155 pages, tables, and 130 maps sheets.

Zimmerman, E.A. 1966. Geology and Ground-Water Resources of Western and Southern Parts of Judith Basin, Montana. Montana Bureau of Mines and Geology, Butte, Montana, Bulletin 50-A. 33 pages, 4 plates.

PHYSICAL ENVIRONMENT

2. AIR Would the Proposed Action result in:	POTENTIAL IMPACT				CAN IMPACT BE MITIGATED	COMMENT INDEX
	UNKNOWN	NONE	MINOR	SIGNIFICANT		
a. Emission of air pollutants or deterioration of ambient air quality?			X		Yes	2(a)
b. Creation of objectionable odors?			X		Yes	2(b)
c. Alteration of air movement, moisture, or temperature patterns or any change in climate, either locally or regionally?		X				
d. Adverse effects on vegetation, including crops, due to increased emissions of pollutants?		X				

AFFECTED ENVIRONMENT:

The proposed game farm site is situated in an upland grassland away from commonly traveled public roads. This area is sparsely populated with no apparent air quality problems. This area is not classified for air quality attainment status (DEQ 1997).

PROPOSED ACTION:

- 2(a) Fence construction and road use may result in short-term minor increases in particulate matter in ambient air.
- 2(b) Minor odor problems may result from waste management practices in areas where elk/deer concentrate to feed. Other than the applicant, there is only one resident within a 1-mile radius of the proposed game farm; this residence is located approximately ½-mile south of the Barta Ranch game farm site.

NO ACTION:

No impacts to air quality are expected to result from the No Action Alternative.

CUMULATIVE EFFECTS:

No additional impacts from past, present or reasonably foreseeable activities near the proposed game farm are anticipated.

COMMENTS:

Dust and odor are not expected to be of significant concern at the proposed game farm site due to the sparse population in this area. If dust and/or odor problems arise, mitigation measures can be implemented.

Required Stipulations: None

Recommended Mitigation Measures:

- Dust management activities include spraying water on unpaved roads during the dry season, vegetating exposed ground where possible, protecting fill piles from wind erosion, and limiting ground disturbance to only the area necessary to complete the job.
- Employ the following best management practices (BMPs) to reduce odor problems if they occur: (1) incorporate waste into soil quickly by plowing or discing; (2) spread waste during cool weather or in the morning during warm, dry weather; and (3) cover buried animal carcasses on the game farm with a minimum of 2 feet of soil and at a distance greater than 1-mile from any residence; carcasses may also be sent to a licensed municipal landfill if approved by the landfill operator; carcasses should not be disposed of in or adjacent to water bodies, roads, and ditches. These and other BMPs are described in "Guide to Animal Waste Management and Water Quality Protection in Montana" (DEQ 1996).

REFERENCES:

Montana Department of Environmental Quality (DEQ), 1997. Montana Air Quality Non-Attainment Areas. Revised January, 1997.

DEQ, 1996. Guide to Animal Waste Management and Water Quality Protection in Montana. Helena, MT.

PHYSICAL ENVIRONMENT

3. WATER	POTENTIAL IMPACT				CAN IMPACT BE MITIGATED	COMMENT INDEX
	Would the Proposed Action result in:	UNKNOWN	NONE	MINOR	SIGNIFICANT	
a.	Discharge into surface water or any alteration of surface water quality including but not limited to temperature, dissolved oxygen or turbidity?		X			
b.	Changes in drainage patterns or the rate and amount of surface runoff?			X		Yes 3(b)
c.	Alteration of the course or magnitude of flood water or other flows?		X			
d.	Changes in the amount of surface water in any water body or creation of a new water body?		X			
e.	Exposure of people or property to water related hazards such as flooding?		X			
f.	Changes in the quality of groundwater?			X		Yes 3(f)
g.	Changes in the quantity of groundwater?		X			
h.	Increase in risk of contamination of surface or groundwater?			X		Yes 3(f)
i.	Violation of the Montana non-degradation statute?		X			
j.	Effects on any existing water right or reservation?		X			
k.	Effects on other water users as a result of any alteration in surface or groundwater quality?		X			
l.	Effects on other water users as a result of any alteration in surface or groundwater quantity?		X			

AFFECTED ENVIRONMENT:

The Barta Ranch game farm is located in the Judith Basin on a gentle east-sloping bench between Coyote Creek to the south and Weber Coulee to the north (Figure 2). Coyote Creek joins West Buffalo Creek approximately 1½ miles southeast of the game farm site (Figure 1). Weber Coulee extends eastward and joins Big Coulee approximately 7 miles northeast of the game farm area. Both of these drainages are tributary to Ross Fork Creek which flows northward to the Judith River; Ross Fork Creek is located approximately 7 miles east of the game farm site. No surface water or drainages occur on the relatively flat 200-acre game farm expansion site. Irrigation does not occur on the proposed game farm site. No springs, seeps, or wetlands occur on the game farm site. The nearest known spring located downgradient of the game farm site is approximately 2 miles to the east (Zimmerman, 1996).

An existing 125-foot deep well near the southeast corner of the game farm site supplies the existing game farm operation and would provide water to the expansion area; the depth to water in this well is approximately 37 feet (Montana Bureau of Mines and Geology, 1998). Another well in the same general area supplies potable water to the Barta residence. Water rights records from the Montana Department of Natural Resources and Conservation (1998) show two wells approximately ½ to 1 mile east (downgradient; T13N, R14E, Sec. 35) of the Barta Ranch game farm site.

PROPOSED ACTION:

- 3(b) Increased runoff and erosion could occur in some areas of the game farm expansion if the stocking rate exceeds the carrying capacity of the pasture and vegetative cover is diminished. The relatively large game farm area and proposed maximum stocking rate (200 elk/deer on 200 acres), however, should allow for maintenance of adequate vegetative cover.

If vegetative cover is reduced significantly, the game farm would be an "animal feeding operation" (ARM 17.30.1304(3)) on the project site to control runoff and do not have a "concentrated animal feeding operations" (CAFO) discharge. A CAFO permit, however, is not expected for a game farm operation.

- 3(f) Domestic elk fecal matter and nutrient-enriched water may enter groundwater in the vicinity of the game farm, primarily during precipitation events.

Vague what is the definition of reduce significantly, how much reductions needed before it is an animal feeding operation

NO ACTION:

Current hydrologic conditions are not expected to change and hay production is likely to continue in the expansion area.

CUMULATIVE EFFECTS:

The general area is used for ranching activities. Therefore, the cumulative effect of using the 200-acre site for a game farm would not cause any cumulative effects on water resources.

COMMENTS:

Due to potential minor impacts identified above from increased erosion, runoff, and elk fecal matter, several mitigation measures are recommended. Other water quality protection practices may be required by the Montana Department of Environmental Quality (DEQ) if it is determined that a CAFO permit is necessary. Refer to "Guide to Animal Waste Management and Water Quality Protection in Montana" (DEQ 1996) and "Common Sense and Water Quality, A Handbook for Livestock Producers" (Montana Department of Health and Environmental Sciences, 1994) for further information on mitigation measures and CAFO permits. The following management practices are recommended to minimize the risk of discharging pollutants to state water:

Required Stipulations: None.

Recommended Mitigation Measures:

- Maintain a reasonable stocking rate in the game farm area to mitigate potential impacts from erosion and fecal matter. Potential water quality impacts also could be minimized by disposing dead animals and excess fecal material at a site that is isolated from surface water and groundwater (disposal must meet county regulations for solid waste).
- For any areas that may have erosion and sedimentation problems, utilize best management practices (BMPs) where surface water could enter Coyote Creek or Weber Coulee. The BMPs may include earth berms, straw bale dikes, vegetative buffer zones, and/or silt fences.

REFERENCES:

Montana Bureau of Mines and Geology (MBMG), 1998. Computer File Search of Driller's Well Logs. Butte MBMG office. Obtained online from Internet. June 1998.

Montana Department of Environmental Quality (DEQ), 1996. Guide to Animal Waste Management and Water Quality Protection in Montana. Helena, MT.

Montana Department of Health and Environmental Sciences (DHES), 1994. Common Sense and Water Quality, A Handbook for Livestock Producers. Water Quality Division. Helena, MT.

Montana Department of Natural Resources and Conservation (DNRC), 1998. Computer File Search of Water Rights. Helena DNRC office. Obtained online from Internet. June 1998.

Zimmerman, E.A., 1966. Geology and Ground-Water Resources of Western and Southern Parts of Judith Basin, Montana. Montana Bureau of Mines and Geology, Bulletin 50-A, July 1966.

PHYSICAL ENVIRONMENT

4. VEGETATION Would the Proposed Action result in:	POTENTIAL IMPACT				CAN IMPACT BE MITIGATED	COMMENT INDEX
	UNKNOWN	NONE	MINOR	SIGNIFICANT		
a. Changes in the diversity, productivity or abundance of plant species?			X		Yes	4(a)
b. Alteration of a plant community?			X		Yes	4(b)
c. Adverse effects on any unique, rare, threatened, or endangered species?		X				
d. Reduction in acreage or productivity of any agricultural land?			X		Yes	4(d)
e. Establishment or spread of noxious weeds?			X		Yes	4(e)

AFFECTED ENVIRONMENT:

The proposed Barta Ranch game farm expansion consists of a 200-acre tract for purposes of raising up to 180 elk and possibly 20 deer (mule and white-tailed). This area is currently used to grow dryland alfalfa (36 acres), grass hay (26 acres), and native pasture for grazing purposes (138 acres). The native grass pasture does have scattered crested wheatgrass and yellow sweetclover, but for the most part is comprised of native grasses and forbs. Adjacent lands to the proposed game farm site are farmed as dryland wheat. Environmental impacts identified in this document are compared to the existing conditions of hay production during the summer and seasonal cattle grazing. The existing game farm enclosure is approximately 2 acres in size and typically contains 20-30 elk. There is a need to reduce the stocking density at the existing game farm; the proposed expansion would reduce the stocking density from 10-15 elk per acre to one elk or deer per acre or less.

The elevation at the relatively flat game farm site is approximately 4,700 feet. Native vegetation in the dryland alfalfa pasture has been replaced with alfalfa and smooth brome. The grass hay pasture is primarily smooth brome. Hay production on these two pastures averages about 1.5 tons per acre. Dominant vegetation in the native grass pasture includes green needlegrass, needle-leaf sedge, blue grass (not identified to species), western wheatgrass, crested wheatgrass, yellow sweetclover, broom snakeweed, and fringed sagewort. Estimated forage production in this area would be 1000-1500 pounds per acre. Total production within the proposed 200-acre pasture in an average year would be about 300,000 pounds of forage.

PROPOSED ACTION:

- 4(a) The Proposed Action would place up to 180 adult elk and 20 adult deer within the enclosure for a maximum stocking density of 1.1 acres per adult elk and 10 acres per adult deer (180 elk plus 20 deer would be equivalent to about 186 elk grazing in this area). The average adult elk consumes about 11 pounds of forage each day and that annual consumption would be about 4,015 pounds of forage per adult animal. Adult deer would consume about 3.5 pounds of forage each day and about 1,278 pounds of forage on an annual basis. Forage produced within the 200-acre enclosure ($\approx 300,000$ pounds) would only meet about 40 percent of the year-long forage needs of 180 adult elk and 20 adult deer ($\approx 750,000$ pounds). Assuming that long-term grazing impacts do not decrease forage production significantly, supplemental feed would need to be provided to the 200 elk and deer for over half the year. This level of intensive grazing would likely alter the native plant community in favor of short grasses such as blue grass and blue grama. Broom snakeweed and fringed sagewort would likely increase, too. The dryland alfalfa area also is expected to be replaced by grasses over a period of several years.

- 4(b) Areas intensively used by elk may lose perennial vegetative cover and become barren or support only annual weeds; annual productivity of vegetation would decrease initially. According to calculations presented above regarding forage needs for the elk/deer, and forage produced within the proposed 200-acre enclosure, a total of approximately 75 elk and 10 deer could be grazed in the game farm expansion without adversely impacting vegetation (assumes no use of supplemental feed).
- 4(d) There would be a loss of 62 acres of dryland hay to pasture elk. The 138-acre native grass pasture would be grazed by elk rather than cattle. The conversion of this 200-acre tract to a game farm would not have any adverse impacts on agriculture in the surrounding area.
- 4(e) Intensive grazing by elk and deer at this site would reduce vegetative cover and increase bare ground. This would favor the establishment of annual forbs, some of which may be classified as noxious weeds. Noxious weeds with low palatability such as spotted knapweed would be partially controlled by elk grazing while other weeds that are totally unpalatable such as hounds tongue would not be grazed and would likely increase without control by herbicides.

NO ACTION:

The No Action Alternative would likely result in continuation of the present management. Grass and alfalfa hay would continue to be harvested from 62 acres and cattle would continue to graze the 138-acre native grass pasture.

CUMULATIVE EFFECTS:

Utilization of the 200-acre pasture for domestic elk and deer would not significantly change plant communities or agricultural production in this area.

COMMENTS:

Due to potential impacts identified above on vegetation resources, mitigation measure(s) are recommended.

Required Stipulations: None

Recommended Mitigation Measures:

Supplemental feed should be provided to the elk and deer during fall and winter to meet the nutritional requirements of these animals. Some supplemental feed should also be provided during spring and summer to reduce the probability of overgrazing the site. Even with adequate supplemental feed, some overgrazing of the site likely would occur with more than about 75 elk and 10 deer.

PHYSICAL ENVIRONMENT

5. FISH/WILDLIFE Would the Proposed Action result in:	POTENTIAL IMPACT				CAN IMPACT BE MITIGATED	COMMENT INDEX
	UNKNOWN	NONE	MINOR	SIGNIFICANT		
a. Deterioration of critical fish or wildlife habitat?		X				5(a)
b. Changes in the diversity or abundance of game species?		X				
c. Changes in the diversity or abundance of nongame species?			X		Yes	5(c)
d. Introduction of new species into an area?		X				
e. Creation of a barrier to the migration or movement of animals?			X		Yes	5(e)
f. Adverse effects on any unique, rare, threatened, or endangered species?		X				
g. Increase in conditions that stress wildlife populations or limit abundance (including harassment, legal or illegal harvest or other human activity)?		X				
h. Increased risk of contact and disease between game farm animals and wild game?			X		Yes	5(h)

AFFECTED ENVIRONMENT:

Current big game use in the Barta Ranch game farm area is restricted primarily to a small number of pronghorn antelope. This area formerly supported more pronghorns, but a high female harvest rate and harsh winter in 1996-97 have reduced the herd substantially (Earl Barta, pers. commun., 1998). Pronghorn are seasonally migratory through this area. They tend to winter on high windswept ridges closer to the Little Belt Mountains, move to lower elevations in spring, and slowly move to higher elevations as summer and fall progress.

White-tailed deer occur in this area, but generally their use is restricted to riparian habitat along small streams and shelter belts around ranch/farm headquarters. Mule deer occur only as transient individuals through this area (Figure 3). An occasional bull elk would be expected to pass through this area since the Little Belt Mountains (Figure 3) and Snowy Mountains are relatively close (3 miles and 12 miles, respectively). Upland game birds in this area are primarily Hungarian partridge (Earl Barta, pers. commun., 1998). Due to the proximity of the proposed game farm expansion area to these mountains, it is conceivable that an occasional mountain lion or black bear might pass through the area. There are no known threatened or endangered species that inhabit the proposed game farm site, or live in proximity to the site. There are no aquatic resources associated with the proposed game farm expansion.

PROPOSED ACTION:

- 5(a) The Proposed Action would place up to 180 adult elk and 20 adult deer within the 200-acre pasture. Although the enclosure will be constructed during a single phase, the elk herd would be developed incrementally over a period of several years and boarding of elk may be used as an economic means to increase the herd size. Deer would be placed in this pasture on an opportunistic basis.

When completed, wild pronghorn and deer would be excluded from approximately 200 acres of native prairie and dryland hay. This habitat is widely distributed within the general area and the loss of 200 acres of native pasture and dryland hay would not be significant. This site is not critical habitat for any big game species. Currently, pronghorn numbers in this area are limited by a heavy legal harvest, and deer use of this area is restricted by lack of adequate vegetative and topographic cover. The proposed game farm is immediately adjacent to the Barta Ranch headquarters and this area probably receives very little use by wild ungulates due the presence of people, dogs, and livestock.

- 5(c) The Proposed Action is expected to change slightly the diversity and abundance of at least two nongame species living in this area. The proposed game farm site is currently used for courtship displays and presumably for nesting by the Sprague's pipit. This species is associated with moderately grazed to lightly grazed upland grass dominated ridges. The intensive grazing by elk and deer would likely render this site unsuitable for the Sprague's pipit. However, intensively grazed sites are preferred foraging and nesting areas for the horned lark and they would be expected to utilize this site following the introduction of elk and deer.
- 5(e) The proposed game farm is not large enough to significantly influence seasonal movement of pronghorn and deer through this area. The daily movements of a few pronghorn and deer may be changed to a minor degree, but this would not be significant. Due to the upland location of the proposed game farm, there would be no impacts to aquatic systems beyond those already related to intensive farming and grazing that presently occur in this area. An occasional hungarian partridge or pheasant might fly into the fence and be fatally injured, but this would be a rare event; this would effect individuals but not populations.
- 5(h) There is an undetermined potential of domestic elk or deer carrying or becoming infected with a contagious wildlife disease or parasite such as tuberculosis or meningeal worm, and then coming in contact (through-the-fence, nose-to-nose, nose-to-soil, or ingress/egress) with wild deer, elk, or other wildlife. It is also possible that diseases and parasites carried by wild elk or deer could be introduced to domestic elk or deer. Ingress of wild elk or deer would likely result in destruction of the trespassing animals. Spread of a contagious wildlife disease may directly or indirectly (depending upon the nature of the disease) affect the human environment by reducing the number of wild deer and elk available for hunting or exposing hunters to diseases that are contagious to humans as well. Although release of a contagious disease in the wild could severely impact native wildlife populations, the risk of disease transmission from domestic elk/deer to wild elk/deer is very low and can be minimized by routine disease surveillance of the herd and maintenance of a game proof fence. Additional brucellosis and tuberculosis information is contained in Section 8 (*Risk/Health Hazards*) of this EA (pp. 31-32).

This analysis assumes that all domestic elk entering the enclosure have been genetically screened or otherwise certified that they do not carry red deer genes. If not, there is a risk that ingress/egress may lead to genetic pollution of the wild elk population.

NO ACTION:

No wildlife related impacts are expected to occur under the No Action Alternative. The 200-acre native pasture and hayland would continue to be grazed and used to raise hay under the No Action Alternative.

CUMULATIVE EFFECTS:

There would be no cumulative effects on wildlife associated with this project.

COMMENTS:

One stipulation is required to reduce predicted impacts from ingress/egress. Other mitigation measures are recommended to minimize potential impacts to free-ranging wildlife.

Required Stipulations:

Report ingress of any wild game animals and predators (i.e., bear, lion, and coyote) or egress of domestic elk or deer to the Montana FWP immediately. The report must contain the probable reason why or how ingress/egress occurred.

The above stipulation is imposed to mitigate risk to wildlife health posed by the proposed game farm. Information required by the stipulation in the event of ingress or egress would help both the applicant and FWP to address ingress/egress and to minimize contact between wild and domestic animals. This stipulation, in addition to existing FWP fencing and wildlife protection requirements, would effectively reduce the risk to wildlife health.

Recommended Mitigation Measures:

The following standard game farm management practices will help to minimize impacts to free ranging fish and wildlife species. Implementation of these practices is highly recommended and should be considered a form of mitigation.

- Store hay, feed, and salt away from exterior fences or enclose in buildings.
- Feed game farm animals at interior portions of the enclosure and not along the perimeter fence.
- Remove dead animals, excess fecal material, and waste feed from the game farm and deposit at an approved site not likely to be used by humans, domestic animals, and wild animals.
- Inspect exterior game farm fence on a regular basis and immediately after events likely to damage fence to ensure its integrity with respect to trees, frost-heaving, corrosion, burrowing animals, predators, and other game animals.
- If fence integrity or ingress/egress becomes a problem, adjust the fence as necessary, including: double fencing, electrification, additional post support, replacing damaged posts, or increased fence height.
- During winters of exceptional snow cover, remove snow on either side of the perimeter fence to prevent ingress/egress, or keep game farm animals away from fence areas where significant snow buildup occurs.

REFERENCES:

Barta, Earl, 1998. Barta Ranch game farm manager, personal communication with Craig Knowles, FaunaWest Wildlife Consultants. June 1998.

HUMAN ENVIRONMENT

6. NOISE EFFECTS Would Proposed Action result in:	POTENTIAL IMPACT				CAN IMPACT BE MITIGATED	COMMENT INDEX
	UNKNOWN	NONE	MINOR	SIGNIFICANT		
a. Increases in existing noise levels?			X		Yes	6(a)
b. Exposure of people to severe or nuisance noise levels?		X				

AFFECTED ENVIRONMENT:

Little noise occurs in the general area of the proposed game farm expansion because of the sparse population and lack of other activities in this area that would generate noise.

PROPOSED ACTION:

- 6(a) The Proposed Action would result in a minor short-term increase in existing noise levels from fence construction, land clearing, and other activities conducted to develop the game farm expansion. The nearest residence to the proposed expansion area is located approximately ½-mile to the south, with other residences located more than a mile away.

NO ACTION:

No impacts to existing noise levels are expected from the No Action Alternative.

CUMULATIVE EFFECTS:

No additional impacts on noise levels from past, present or reasonably foreseeable activities near the proposed game farm are anticipated.

COMMENTS:

Due to the distance to the nearest residence and overall sparse population in the area, noise generated from the proposed game farm expansion should not cause a problem. If noise concerns are raised, mitigation measures can be employed.

Required Stipulations: None

Recommended Mitigation Measures:

Impacts to neighbors from construction noise can be reduced by limiting noisy activities to daylight hours and completing construction as soon as possible.

HUMAN ENVIRONMENT

7. <u>LAND USE</u> Would Proposed Action result in:	POTENTIAL IMPACT				CAN IMPACT BE MITIGATED	COMMENT INDEX
	UNKNOWN	NONE	MINOR	SIGNIFICANT		
a. Alteration of or interference with the productivity or profitability of the existing land use of an area?		X				
b. Conflict with a designated natural area or area of unusual scientific or educational importance?		X				
c. Conflict with any existing land use whose presence would constrain or potentially prohibit the Proposed Action?		X				
d. Conflict with any existing land use that would be adversely affected by the Proposed Action?		X				
e. Adverse effects on or relocation of residences?		X				

AFFECTED ENVIRONMENT:

Principal land use of the proposed expansion area and vicinity is hay production and upland prairie rangeland for cattle grazing (Figure 2). Ranching residences are sparsely located throughout the area. The nearest residence to the Barta Ranch game farm site is approximately ½-mile to the south, with other residences located over a mile away. The area is not zoned for a specific use (Ward Smail, pers. commun., 1998) and is currently utilized by wild game. State-owned land in the vicinity of the Barta Ranch game farm site is shown on Figure 1.

PROPOSED ACTION:

The proposed expansion area would be consistent with existing land uses. Use of the proposed game farm area for an elk/deer farm may increase the value of the land. Public hunting in the general area occurs, especially in the Little Belt Mountains to the west. The presence of the game farm would not, however, restrict adjoining landowners or the general public from hunting and discharging firearms on other private or public property in the area.

NO ACTION:

If the proposed game farm expansion area is not developed, use of the site would likely continue for hay production and rangeland grazing.

CUMULATIVE EFFECTS:

Because no proposals or applications for future development in the vicinity of the proposed expansion area are currently on file with Judith Basin County, and no past or present activities have adversely affected the game farm area, no potential cumulative effects on land use from the Proposed Action and past, present and reasonably foreseeable actions to land use are anticipated.

COMMENTS:

Impacts to land use are none to potentially positive; therefore, no mitigation measures are recommended.

REFERENCES:

Smail, Ward. Judith Basin County Assessment and Appraisal Office. Personal communication with D. Digrindakis, Maxim Technologies, Inc. June 8, 1998.

HUMAN ENVIRONMENT

8. <u>RISK/HEALTH HAZARDS</u> Would Proposed Action result in:	POTENTIAL IMPACT				CAN IMPACT BE MITIGATED	COMMENT INDEX
	UNKNOWN	NONE	MINOR	SIGNIFICANT		
a. Risk of dispersal of hazardous substances (including, but not limited to chemicals, pathogens, or radiation) in the event of an accident or other forms of disruption?		X				
b. Creation of any hazard or potential hazard to domestic livestock?			X		Yes	8(b)
c. Creation of any hazard or potential hazard to human health?			X		Yes	8(c)

AFFECTED ENVIRONMENT:

See descriptions of affected environment in previous sections of this EA.

PROPOSED ACTION:

8(b) Brucellosis and tuberculosis are potentially transmittable from elk to cattle and cattle to elk. Chronic wasting disease also has been detected in game farm elk. The risk of disease being passed from domestic elk to domestic livestock would be minimal if the fence integrity is maintained and appropriate mitigation measures are followed. Potential for disease transmission to domestic livestock from game farm animals is also mitigated through DoL disease testing requirements. All animals placed on this game farm would be required to be tested for tuberculosis at the time of import, purchase and/or transportation to the game farm. A test for brucellosis is required for all Cervids that are sold or moved within the state, and is required for all game farm animals imported into Montana. Each game farm is required to have an isolation pen (quarantine facility) on the game farm to isolate any animals that are imported or become ill. The state veterinarian can require additional testing and place herds under strict quarantine should problems arise. Routine brucellosis and tuberculosis testing requirements for game farm animals offer a measure of surveillance that minimizes that risk. Failure to comply with these requirements is grounds for license revocation.

8(c) If tuberculosis or brucellosis were to be transmitted from domestic elk to wild elk and deer, hunters field dressing wild elk and deer would be subject to some risk of infection. Veterinarians and meat cutters working with diseased game farm animals are at risk of becoming infected with brucellosis or tuberculosis. Risk to human health from diseased animals could be significant. Spread of a contagious wildlife disease may directly or indirectly (depending upon the nature of the disease) effect the human environment by reducing the number of wild deer available for hunting or exposing hunters to diseases that are contagious to humans as well.

The game farm expansion site may be used occasionally for shooting a game farm animal by the owner or member of the public. This shooting would occur at relatively close range (Earl Barta, pers. comm., 1998). Since the nearest residence is about ½-mile to the south, and road traffic is primarily local residents, no danger to human health from the potential shooting is expected.

NO ACTION:

No additional impacts or risks would occur from health hazards under the No Action Alternative beyond those that may occur with the existing game farm operation.

CUMULATIVE EFFECTS:

No additional impacts from past, present or reasonably foreseeable activities near the proposed game farm are anticipated.

COMMENTS:

Required Stipulations: None.

Recommended Mitigation Measures:

The mitigation measures recommended in Section 5 (*Fish/Wildlife*; pp. 25-27) are applicable to this section. In addition, risk of disease epidemic or heavy parasite infections among domestic elk can be minimized by maintaining a reasonable domestic elk stocking rate in relation to the enclosure size, management of manure in accordance with DEQ (1996) guidance, and adherence to disease testing requirements.

REFERENCES:

Barta, Earl, 1998. Owner of Barta Ranch game farm, pers. commun., June 1998.

Montana Department of Environmental Quality (DEQ), 1996. Guide to Animal Waste Management and Water Quality Protection in Montana. Helena, MT.

HUMAN ENVIRONMENT

9. COMMUNITY IMPACT Would Proposed Action result in:	POTENTIAL IMPACT				CAN IMPACT BE MITIGATED	COMMENT INDEX
	UNKNOWN	NONE	MINOR	SIGNIFICANT		
a. Alteration of the location, distribution, density, or growth rate of the human population of an area?		X				
b. Alteration of the social structure of a community?		X				
c. Alteration of the level or distribution of employment or community or personal income?		X				
d. Changes in industrial or commercial activity?		X				
e. Changes in historic or traditional recreational use of an area?		X				
f. Changes in existing public benefits provided by affected wildlife populations and wildlife habitats (educational, cultural or historic)?		X				
g. Increased traffic hazards or effects on existing transportation facilities or patterns of movement of people and goods?		X				

AFFECTED ENVIRONMENT:

The proposed game farm expansion would be located in a rural area in the vicinity of sparsely located ranch houses. The nearest town to the proposed game farm expansion site is Buffalo, Montana (5 miles to the east; Figure 1), and Lewistown (25 miles to the northeast). The game farm site is located near ranching access roads and near state-owned land (Figure 1).

PROPOSED ACTION:

As a result of the distance to the nearest community, no adverse impacts to the community are expected from the proposed game farm expansion. No employees would be hired as a result of the Proposed Action. While the Proposed Action may increase the income level for the applicant and increase taxes paid to the county, these increases would be relatively minor with respect to the community.

NO ACTION:

No adverse impacts to the community would result from the No Action Alternative.

CUMULATIVE EFFECTS:

No adverse impacts to the community are expected to result from the Proposed Action and past, present and reasonably foreseeable activities in the vicinity of the game farm.

COMMENTS:

No mitigation measures are recommended with respect to community impacts.

HUMAN ENVIRONMENT

10. <u>PUBLIC SERVICES & TAXES</u>	POTENTIAL IMPACT				CAN IMPACT BE MITIGATED	COMMENT INDEX
	Would Proposed Action result in:	UNKNOWN	NONE	MINOR	SIGNIFICANT	
a. A need for new or altered government services (specifically an increased regulatory role for FWP and Dept. of Livestock)?				X		No 10(a)
b. A change in the local or state tax base and revenues?				X		NA 10(b)
c. A need for new facilities or substantial alterations of any of the following utilities: electric power, natural gas, other fuel supply or distribution systems, or communications?			X			

PROPOSED ACTION:

- 10(a) FWP and DoL would be required to have an increased work load associated with the game farm expansion for fence and animal inspections and monitoring. For this relatively small game farm expansion, however, the increased work load is expected to be minor.
- 10(b) Placement of elk would increase the annual tax contribution of the proposed game farm, with collected taxes going toward the county general fund and local school district and a per capita tax that goes to the DoL. According to the Judith Basin County Assessment and Appraisal Office, elk are taxed at the same rate as purebred cattle. Estimated annual taxes due to Judith Basin County from the proposed game farm would be between \$4 and \$9 per head, depending on the sex of the elk (Ward Smail, pers. commun., 1998). According to DoL, the average per capita tax is \$12 per head for game farm animals compared to \$1.20 per head for cattle (Schultz 1997).

NO ACTION:

No additional taxes would be collected from the applicant under the No Action Alternative. The applicant may continue to lease pasture for cattle grazing in the proposed game farm area.

CUMULATIVE EFFECTS:

No adverse cumulative effects to public services, taxes, and utilities are anticipated to result from the Proposed Action and past, present and reasonably foreseeable activities in the vicinity of the proposed game farm.

COMMENTS:

No mitigation measures are recommended with respect to public services, taxes, and utilities.

REFERENCES:

Smail, Ward. Judith Basin County Assessment and Appraisal Office. Personal communication with D. Digrindakis, Maxim Technologies, Inc. June 8, 1998.

Schultz, Luella. 1997. Department of Livestock, Animal Health Division. Memorandum to Maxim Technologies. October 27, 1997.

HUMAN ENVIRONMENT

11. AESTHETICS/RECREATION Would Proposed Action result in:	POTENTIAL IMPACT				CAN IMPACT BE MITIGATED	COMMENT INDEX
	UNKNOWN	NONE	MINOR	SIGNIFICANT		
a. Alteration of any scenic vista or creation of an aesthetically offensive site or effect that is open to public view?		X				
b. Alteration of the aesthetic character of a community or neighborhood?		X				
c. Alteration of the quality or quantity of recreational/tourism opportunities and settings?		X				

AFFECTED ENVIRONMENT:

The game farm site is located near ranch access roads that are not typically used by the general public. Some of the roads access the Little Belt Mountains to the west; however, this is a relatively small amount of seasonal traffic (Earl Barta, pers. comm., 1998). The game farm property is surrounded on all sides by privately-owned land, with some state-owned land located within 1 mile to the south (Figure 1).

PROPOSED ACTION:

No adverse impacts to the public view, character of the neighborhood, or recreational opportunities in the area would result from the Proposed Action.

NO ACTION:

No adverse impacts to aesthetics or recreational opportunities in the area would result from the No Action Alternative.

CUMULATIVE EFFECTS:

No additional impacts from past, present and reasonably foreseeable activities near the proposed game farm are anticipated.

COMMENTS:

No mitigation measures are recommended with respect to aesthetics and recreation.

REFERENCES:

Barta, Earl, 1998. Barta Ranch game farm owner; personal communication with Doug Rogness, Maxim Technologies, Inc.; June 1998.

HUMAN ENVIRONMENT

12. <u>CULTURAL & HISTORICAL RESOURCES</u> Would Proposed Action result in:	POTENTIAL IMPACT				CAN IMPACT BE MITIGATED	COMMENT INDEX
	UNKNOWN	NONE	MINOR	SIGNIFICANT		
a. Destruction or alteration of any site, structure or object of prehistoric, historic, or paleontological importance?	X				Yes	12(a)
b. Physical change that would affect unique cultural values?		X				
c. Effects on existing religious or sacred uses of a site or area?		X				

AFFECTED ENVIRONMENT:

There are no previously recorded historic or archaeological sites on the proposed game farm expansion area based on a cultural resource file search by the State Historical Preservation Office (SHPO 1998).

PROPOSED ACTION:

- 12(a) According to SHPO (1998), because of the lack of previous inventory, a reconnaissance survey should be conducted prior to project initiation. This would determine if sites exist and if they would be impacted by the Proposed Action.

NO ACTION:

No impacts to unknown cultural resources are expected from the No Action Alternative unless other disturbances occur within the property.

CUMULATIVE EFFECTS:

No additional impacts from past, present and reasonably foreseeable activities near the proposed game farm are anticipated.

COMMENTS:

Required Stipulations: None.

Recommended Mitigation Measures:

Conduct a reconnaissance-level cultural resource survey of the expansion area prior to initiation of the project. If archeological artifacts are observed during construction of the game farm fence or from other activities, work should stop in the area and the discovery reported to:

Montana Historical Society; Historic Preservation Office
1410 8th Avenue; P.O. Box 201202; Helena, Montana 59620
phone (406) 444-7715

If work stoppage in the area containing observed artifacts is not possible, record the location and position of each object, take photographs, and preserve the artifact(s).

REFERENCES:

Montana State Historic Preservation Office (SHPO), 1998. Letter from Connie Constan (SHPO, Helena, MT) to Daphne Digrindakis (Maxim Technologies, Inc.), dated June, 1998.

SUMMARY

13. SUMMARY Would the Proposed Action, considered as a whole:	POTENTIAL IMPACT				CAN IMPACT BE MITIGATED	COMMENT INDEX
	UNKNOWN	NONE	MINOR	SIGNIFICANT		
a. Have impacts that are individually limited, but cumulatively considerable? (A project or program may result in impacts on two or more separate resources which create a significant effect when considered together or in total)		X				
b. Involve potential risks or adverse effects which are uncertain but extremely hazardous if they were to occur?			X		Yes	13(b)
c. Potentially conflict with the substantive requirements or any local, state, or federal law, regulation, standard or formal plan?		X				
d. Establish a precedent or likelihood that future actions with significant environmental impacts would be proposed?	X					13(d)
e. Generate substantial debate or controversy about the nature of the impacts that would be created?			X		Yes	13(d)

PROPOSED ACTION:

- 13(b) There is an undetermined potential of domestic elk or deer carrying or becoming infected with a contagious wildlife disease or parasite such as tuberculosis, chronic wasting disease, or meningeal worm and then coming in contact (through-the-fence, nose-to-nose, nose-to-soil, or ingress/egress) with wild deer, elk, or other wildlife. Release of a contagious disease in the wild could severely impact native wildlife populations. It is also possible that disease and parasites carried by wild elk could be introduced to domestic elk. Ingress of wild elk or deer would likely result in the destruction of the trespassing animals.

Spread of a contagious wildlife disease may directly or indirectly (depending on the nature of the disease) affect the human environment by reducing the number of wild deer and elk available for hunting, or exposing hunters to diseases that are contagious to humans as well.

- 13(d) The nature of impacts to wildlife from elk game farms is currently under debate in Montana and other states. The following issues are of the greatest concern:

- Disease transmission from game farm elk to wildlife is possible if the game farm elk are diseased and have an opportunity to come into contact with wild elk or deer.
- Hybridization of Montana's game species resulting from the ingress/egress of animals on game farms.
- Potential for wild animals to ingress into the game farm. Ingressing elk and deer are generally killed, typically by FWP wardens, to prevent potential disease transmittal. Ingressing mountain lions and black bears may be immobilized and removed.
- Theft of wild animals for financial gain on game farms.

These issues are particularly controversial when game farms block migration routes or consume significant areas of land historically utilized by wild game. Inadequate perimeter fencing and fence monitoring by the game farm operator can also lead to ingress/egress events and nose-to-nose contact between wild game and game farm animals. Because the proposed Barta Ranch game farm expansion area is too small to effectively block big game migration routes or consume a significant portion of land utilized by wild game, the controversial nature of the Proposed Action is minor.

SUMMARY EVALUATION OF SIGNIFICANCE CRITERIA

- a. Does the Proposed Action have impacts that are individually minor, but cumulatively considerable? (A project may result in impacts on two or more separate resources which create a significant effect when considered together or in total.)

No, year-long use of the enclosure by up to 180 adult elk and 20 adult deer would not result in any significant cumulative impacts.

- b. Does the Proposed Action involve potential risks or adverse effects which are uncertain but extremely hazardous if they were to occur?

Yes. An unlikely, but extremely hazardous event should it occur, would be the spread of a disease or parasite from domestic elk or deer to wild ungulates. The risk of this event occurring can be reduced by following the mitigations listed in Sections 5 and 8 (*Fish/Wildlife*, pp. 25-27; and *Risk/Health Hazards*, pp. 31-32, respectively), and regular disease surveillance. If white-tailed deer are brought into the game farm they must come from another western game farm that can document the western origin of its deer.

- c. Description and analysis of reasonable alternatives (including the No Action Alternative) to the Proposed Action whenever alternatives are reasonably available and prudent to consider and a discussion of how the alternatives would be implemented:

No Action Alternative: The No Action Alternative would avoid all potential impacts listed above. This site would likely be used for hay production, and be grazed by domestic cattle should the No Action Alternative be selected. The No Action Alternative would probably not result in exclusion of wildlife from this site.

- d. Evaluation and listing of mitigation, stipulation, or other control measures enforceable by the agency or another government agency:

This section provides an analysis of impacts to private property by proposed restrictions or stipulations in this EA as required under 75-1-201, MCA, and the Private Property Assessment Act, Chapter 462, Laws of Montana (1995). The analysis provided in this EA is conducted in accordance with implementation guidance issued by the Montana Legislative Services Division (EQC 1996). A completed checklist designed to assist state agencies in identifying and evaluating proposed agency actions, such as imposed stipulations, that may result in the taking or damaging of private property, is included in Appendix A. Mitigation measures described in this section address both minor and significant impacts. FWP would require stipulations to mitigate all potentially significant impacts from the Proposed Action. Most potential minor impacts from the Proposed Action are addressed as mitigation measures that are strongly recommended, but not required.

Required Stipulation

Report ingress of any wild game animals and predators (i.e., bear, lion, and coyote) or egress of domestic elk or deer to the Montana FWP immediately. The report must contain the probable reason why or how ingress/egress occurred.

Restriction on Private Property Use

This stipulation restricts the use of private property by effectively requiring that the proposed game farm be monitored at least once daily for ingress or egress events. The stipulation is consonant with the current FWP requirement to report egress events immediately [ARM 12.6.1517(2)].

Alternatives

Do not report ingress and egress events to FWP immediately.

This stipulation would not adequately address the increased risk to wildlife health. Ingressing wild animals must be detected immediately to prevent contact with wild game after contact with game farm animals.

Benefits from Imposing the Stipulation

This stipulation is imposed to mitigate predicted risk to wildlife health posed by the proposed game farm expansion. Information provided by the stipulation would help the applicant and FWP to address ingress and egress incidents and to minimize contact between wild and domestic animals. This stipulation, in addition to existing FWP fencing and wildlife protection requirements, would effectively reduce the risk to wildlife health.

Types of Expenditures the Stipulation Would Require

The stipulation to require immediate notice of ingress and egress events would not impose any additional expenditures beyond those necessary to report egress events in accordance with ARM 12.6.1517(2).

Stipulation's Effect on Property Values

None.

PART III. NARRATIVE EVALUATION AND COMMENT

Wildlife use of the area and potential for through-the-fence contact with game farm animals (consider year-around use, traditional seasonal habitat use, and location of travel routes and migration corridors).

Through-the-fence contact: Current big game use in the Barta Ranch game farm area consists primarily of a small number of pronghorn antelope. Pronghorn are seasonally migratory through this area. White-tailed deer occur in this area, but generally their use is restricted to riparian habitat along small streams and shelter belts around ranch/farm headquarters. Mule deer occur only as transient individuals through this area. An occasional bull elk would be expected to pass through this area since the Little Belt Mountains and Snowy Mountains are relatively close. In addition, an occasional mountain lion or black bear might pass through the area.

Transmission of disease or parasites may occur during nose-to-nose contact, nose-to-body contact, and by contacting vegetation and feces along the fence line. Although nose-to-nose contact between domestic elk and wild deer is not likely to occur because of the interspecies differences, it can not be entirely ruled out. Also, there is a remote chance of a wild elk coming in contact with a domestic elk through the fence. Disease transmission may occur from wild ungulates to domestic elk and from domestic elk to wild ungulates. Diseases such as tuberculosis and chronic wasting disease are highly contagious and can be easily transmitted between domestic elk and wild and domestic ungulates. Tuberculosis can also be transmitted to humans and is a serious health risk. Brucellosis is another disease that can be transmitted between domestic and wild ungulates and humans.

Risk of disease transmission can be reduced by maintaining the integrity of the enclosure fence, by maintaining a healthy domestic elk population, and by following the above listed mitigation recommendations. Maintaining a healthy elk herd requires regular testing and surveillance for diseases. If the game farm is managed properly, the risk of disease transmission from domestic elk to wild ungulates would likely be minimal.

Potential for escape of game farm animals or ingress of wildlife (consider site-specific factors that could reduce the effectiveness of perimeter fences built to standards outlined in Rule 12.6.1503A, including steepness of terrain, winter snow depths/drifts, susceptibility of fences to flood damage, etc.).

Fence integrity: Fencing would consist of 8-foot high, tightlock mesh game fence, 2½-inch steel pipe posts spaced not more than 24 feet apart, and 2½-inch steel pipe corner posts. Posts would be set 3 feet into the soil and corners would be braced. Steel gates would be 8 feet high and located in the southeast corner area near the buildings and quarantine/holding facilities.

The proposed game farm is located on nearly level ground and is not crossed by any drainages. Overall, the site potential for fencing this pasture is excellent. Fencing at the existing game farm has held up well over the 3 years of operation. The owners of the game farm (Earl & Cindy Barta) live adjacent to the game farm enclosure and can easily inspect the fence on a daily basis.

The proposed enclosure site is located in the Judith Basin near the foothills of the Little Belt Mountains at an elevation of about 4,700 feet. In a typical year, approximately 1 foot of snow would accumulate at the site. However, 2 to 3 feet of snow may accumulate in some years. During 3 years of operation, snow accumulation has not resulted in ingress/egress problems. This area has a low potential for drifting snow due to the relatively flat ground and lack of obstructions. If snow accumulation appeared to be causing an ingress/egress problem, it would be possible to remove snow from either side of the game farm fence.

Proportion (%) of the total habitat area currently used by wildlife that will be enclosed or otherwise impacted.

The enclosure would exclude resident wild deer and pronghorn antelope from only a minor portion (<1%) of the area they presently have access to. The enclosure of 200 acres of hayland and pasture would not seriously affect wild ungulates or other wildlife species population viability in this area.

PART IV. EA CONCLUSION

1. Based on the significance criteria evaluated in this EA, is an EIS required? YES / NO

No. The appropriate level of analysis for the Proposed Action is a mitigated EA because:

- all impacts of the Proposed Action have been accurately identified in the EA; and
- all identified significant impacts would be mitigated to minor or none.

2. Describe the level of public involvement for this project if any and, given the complexity and the seriousness of the environmental issues associated with the Proposed Action, is the level of public involvement appropriate under the circumstances?

Upon completion of the Draft EA, a notice is sent to adjoining landowners, local newspapers, and other potentially affected interests, explaining the project and asking for input during a 21-day comment period which extends from July 8, 1998 until 5 pm July 29, 1998. The Draft EA is also available to the public from the FWP office in Great Falls at the address and phone listed below and in the *Summary* section of this EA (p. 2), and through the State Bulletin Board System during the public comment period.

3. Duration of comment period if any: 21 days

4. Name, title, address and phone number of the Person(s) Responsible for Preparing the EA:

Fish, Wildlife and Parks

Bob Hammer, FWP Region 4 Game Warden
Box 472
Stanford, Montana 59479
(406) 566-2939

Tom Stivers, FWP Region 4 Wildlife Biologist
126 14th Avenue South
Lewistown, Montana 59457
(406) 538-2445

Karen Zackheim, FWP Game Farm Coordinator
Enforcement Division
1420 E. Sixth Avenue
Helena, MT 59620

Maxim Technologies, Inc.

Daphne Digrindakis, Project Manager
Doug Rogness, Hydrologist
Mike Cormier, Soil Scientist
Val Jaffe, GIS and Graphics

FaunaWest Wildlife Consultants

Craig Knowles, Wildlife Biologist

APPENDIX A

PRIVATE PROPERTY ASSESSMENT ACT CHECKLIST

The 54th Legislature enacted the Private Property Assessment Act, Chapter 462, Laws of Montana (1995). The intent of the legislation is to establish an orderly and consistent process by which state agencies evaluate their proposed actions under the "Takings Clauses" of the United States and Montana Constitutions. The Takings Clause of the Fifth Amendment of the United States Constitution provides: "nor shall private property be taken for public use, without just compensation." Similarly, Article II, Section 29 of the Montana Constitution provides: "Private property shall not be taken or damaged for public use without just compensation..."

The Private Property Assessment Act applies to proposed agency actions pertaining to land or water management or to some other environmental matter that, if adopted and enforced without compensation, would constitute a deprivation of private property in violation of the United States or Montana Constitutions.

The Montana State Attorney General's Office has developed guidelines for use by state agency to assess the impact of a proposed agency action on private property. The assessment process includes a careful review of all issues identified in the Attorney General's guidance document (Montana Department of Justice 1997). If the use of the guidelines and checklist indicates that a proposed agency action has taking or damaging implications, the agency must prepare an impact assessment in accordance with Section 5 of the Private Property Assessment Act. For the purposes of this EA, the questions on the following checklist refer to the following required stipulation(s):

Report ingress of any wild game animals and predators (i.e., bear, lion, and coyote) or egress of domestic elk or deer to the Montana FWP immediately. The report must contain the probable reason why or how ingress/egress occurred.

PRIVATE PROPERTY ASSESSMENT ACT CHECKLIST

DOES THE PROPOSED AGENCY ACTION HAVE TAKINGS IMPLICATIONS UNDER THE PRIVATE PROPERTY ASSESSMENT ACT?

YES	NO		
<u> </u>	<u> X </u>	1.	Does the action pertain to land or water management or environmental regulation affecting private real property or water rights?
<u> </u>	<u> X </u>	2.	Does the action result in either a permanent or indefinite physical occupation of private property?
<u> </u>	<u> X </u>	3.	Does the action deprive the owner of all economically viable uses of the property?
<u> </u>	<u> X </u>	4.	Does the action deny a fundamental attribute of ownership?
<u> </u>	<u> X </u>	5.	Does the action require a property owner to dedicate a portion of property or to grant an easement? [If the answer is NO , skip questions 5a and 5b and continue with question 6.]
<u> </u>	<u> </u>	5a.	Is there a reasonable, specific connection between the government requirement and legitimate state interests?
<u> </u>	<u> </u>	5b.	Is the government requirement roughly proportional to the impact of the proposed use of the property?
<u> </u>	<u> X </u>	6.	Does the action have a severe impact on the value of the property?
<u> </u>	<u> X </u>	7.	Does the action damage the property by causing some physical disturbance with respect to the property in excess of that sustained by the public generally? [If the answer is NO , do not answer questions 7a-7c.]
<u> </u>	<u> </u>	7a.	Is the impact of government action direct, peculiar, and significant?
<u> </u>	<u> </u>	7b.	Has government action resulted in the property becoming practically inaccessible, waterlogged, or flooded?
<u> </u>	<u> </u>	7c.	Has government action diminished property values by more than 30% and necessitated the physical taking of adjacent property or property across a public way from the property in question?

Taking or damaging implications exist if **YES** is checked in response to question 1 and also to any one or more of the following questions: 2, 3, 4, 6, 7a, 7b, 7c; or if **NO** is checked in response to questions 5a or 5b.

If taking or damaging implications exist, the agency must comply with § 5 of the Private Property Assessment Act, to include the preparation of a taking or damaging impact assessment. Normally, the preparation of an impact assessment will require consultation with agency legal staff.